

User

Manual

KTC-117V3/117V9

KTC-217CV3/217CV9

KTC-247CEV3/247CEV9

Cameras



GE Interlogix
Kalatel

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For the latest product specifications, visit GE Interlogix, Kalatel division, online at www.kalatel.com or contact your Kalatel sales representative.

For technical support before and after installation, call 800-469-1676.

Technical support is available 24 hours a day, 7 days a week.

Call:	Tech Support	800-469-1676 (6 A.M. – 5 P.M. PST Monday through Friday)
	Tech Support	541-740-3589 (all other times)
	Main	800-343-3358 or 541-754-9133
Fax:	Tech Support	541-752-9096 (available 24 hours a day)
	Main	541-754-7162
Web:	www.GE-Interlogix.com	

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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

You are cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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BEFORE YOU BEGIN

Read these instructions before installing or operating this product.

Note: This installation should be made by a qualified service person and should conform to local codes.

This manual provides installation and operation information. To use this document, you must have the following minimum qualifications:

- A basic knowledge of CCTV systems and components
- A basic knowledge of electrical wiring and low-voltage electrical hookups

Use this product only for the purpose for which it was designed.

Customer Support

For assistance in installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, contact Kalatel Technical Support:

GE Interlogix, Kalatel division

Call: 800-469-1676

Fax: 541-752-9096

Note: You should be at the equipment, ready with details before calling Technical Support.

Conventions Used in this Manual

Boldface or button icons highlight command entries. The following **WARNING**, **CAUTION**, and **Note** statements identify potential hazards:



*** WARNING:**

Improper use of this equipment can cause severe bodily injury or equipment damage.



**** CAUTION:**

Improper use of this equipment can cause equipment damage.

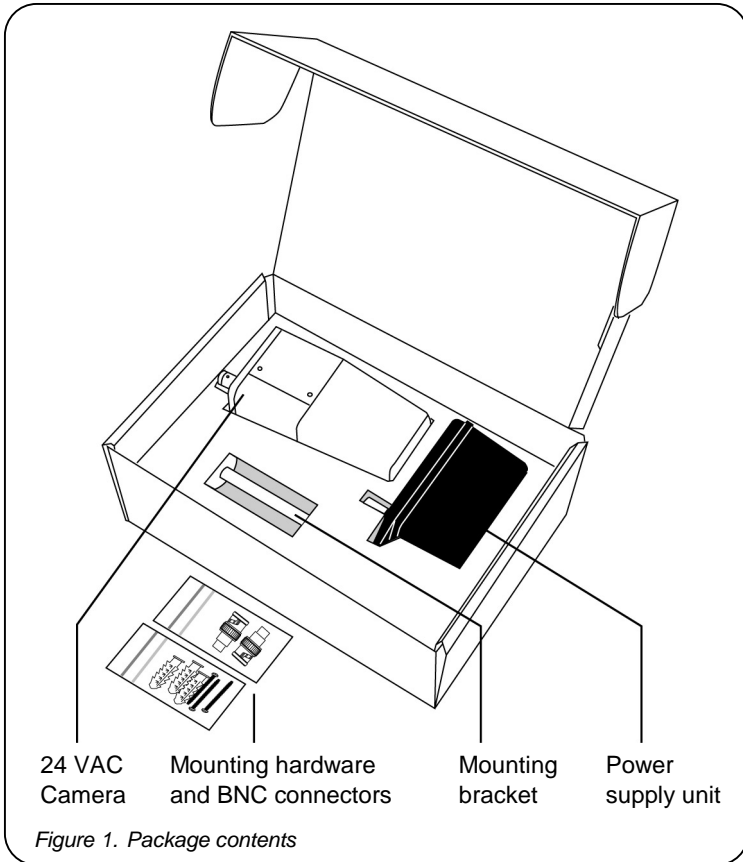
Note: Notes contain important information about a product or procedure.

* This symbol indicates electrical warnings and cautions.

** This symbol indicates general warnings and cautions.

1 INTRODUCTION

The KTC-117/217/247 cameras come in an all-in-one package that includes the components shown in Figure 1.



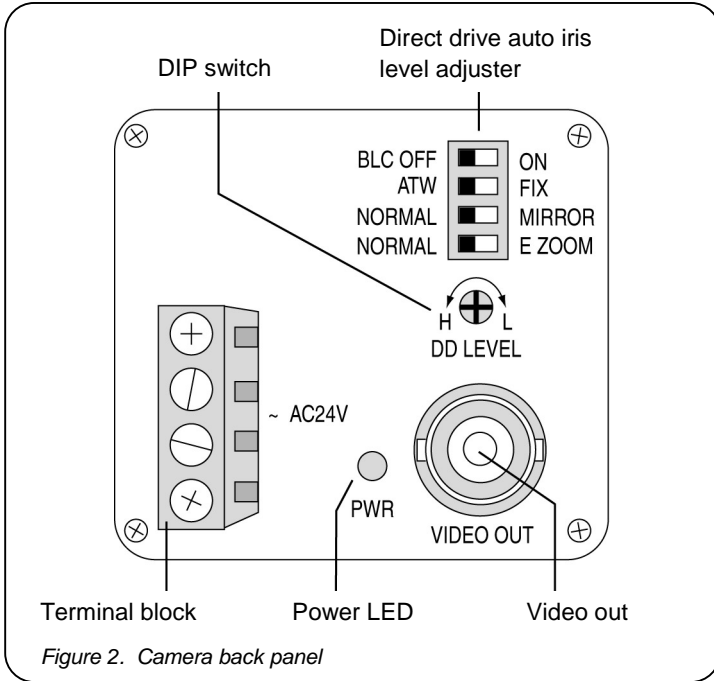
See Table 1 for the camera models and their descriptions.

Table 1. KTC-117/217/247 camera models

Model	Camera type	Built-in lens
KTC-117V3	B/W, high res.	3 – 8 mm
KTC-117V9	B/W, high res.	9 – 22 mm
KTC-217CV3	Color, high res.	3 – 8 mm
KTC-217CV9	Color, high res.	9 – 22 mm
KTC-247CEV3	Ex-View Color, high res.	3 – 8 mm
KTC-247CEV9	Ex-View Color, high res.	9 – 22 mm

2 CAMERA BACK PANEL

See Figure 2 when performing the camera setup and adjustment procedures.



3 PROGRAMMING THE DIP SWITCH

To program the DIP switch (Figure 2), refer to Figure 3 or Figure 4 depending on your camera model.





BLC OFF		ON	Backlight compensation off/on
FL OFF		ON	Flickerless off/on
NORMAL		MIRROR	Normal view / mirror view (flips picture left to right)
NORMAL		E ZOOM	Normal / E Zoom

Figure 3. DIP switch for KTC-117 cameras





BLC OFF		ON	Backlight compensation off / on
ATW		FIX	Auto-tracking white balance / fixed white balance
NORMAL		MIRROR	Normal view / mirror view (flips picture left to right)
NORMAL		E ZOOM	Normal / E Zoom

Figure 4. DIP switch for KTC-217 and KTC-247 cameras

3.1 BACKLIGHT COMPENSATION (BLC OFF OR ON)

Backlight compensation controls iris gain and white balance simultaneously. If you have objects in the foreground that appear silhouetted in front of a brighter background, set backlight compensation to **ON**. The foreground objects appear with greater definition.

Note: Compensation might be insufficient when the background is extremely bright.

3.2 FLICKER CONTROL (FL OFF OR ON)

Note: This switch is not available for the KTC-217 or KTC-247 cameras

If you install the camera in an area with fluorescent lighting, the picture on the camera monitor might flicker. To minimize the flicker effect, set the FL switch to **ON**.

3.3 WHITE BALANCE (ATW OR FIX)

Note: This switch is not available for the KTC-117 cameras

- Auto-tracking white balance (ATW) mode
In the ATW mode, the range of colors in the scene being monitored is tracked continuously, and the white balance is set automatically by an internal micro-controller. If the color range changes constantly, then set the switch to **ATW**.
- Fixed white balance (FIX) mode
In Fix mode, the camera uses white as its reference and automatically adjusts the content of blue and red in the picture to provide a picture with a balanced color content. If the color range of the scene being monitored remains constant, then set the switch to **FIX**.

3.4 VIEW (NORMAL OR MIRROR)

- Normal
In normal mode, the video image appears on the monitor as it appears in front of the camera.
- Mirror
In mirror mode, the video image is flipped left to right before it appears on the monitor.

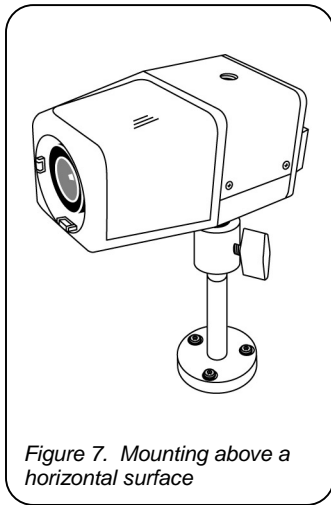
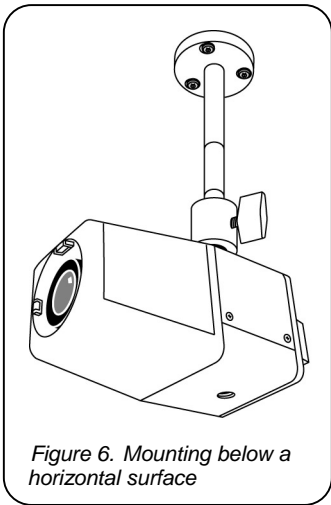
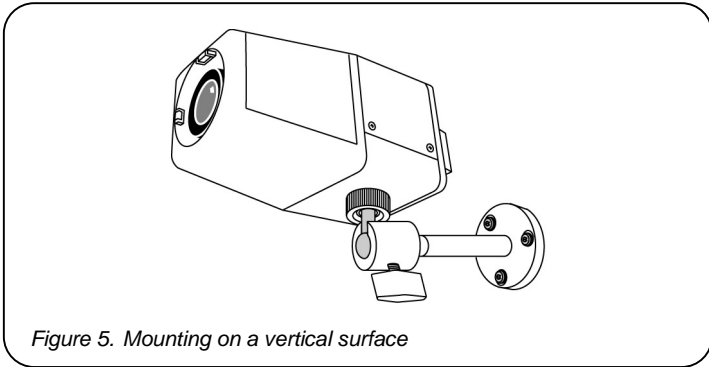
3.5 ZOOM (NORMAL OR E ZOOM)

- Normal
In normal mode, the video image appears without any digital magnification.
- E Zoom
In E Zoom mode, the camera digitally zooms the video image approximately three times that of normal view.

Note: The image quality is not as high in E Zoom mode as it is normal mode.

4 INSTALLING THE BRACKET AND CAMERA

You can mount the camera on a vertical surface (Figure 5), and below (Figure 6) or above (Figure 7) a horizontal surface.



To mount the bracket see section 4.1. To attach the camera to the bracket see section 4.2. To adjust the camera angle see section 4.3.

4.1 MOUNTING THE BRACKET

- 1) Unscrew the mounting plate (Figure 8) from the rest of the bracket.
- 2) Place the mounting plate against the vertical or horizontal mounting surface and mark the location of the three mounting holes.

Note: The camera comes with fasteners and anchors; use only if they are appropriate for the type of mounting surface.

- 3) Prepare the mounting holes appropriately according to the type of surface (concrete, wood, etc.) and fasteners used.

- 4) Attach the mounting plate to the mounting surface. See Figure 9.

Note: To adjust the length of the bracket, remove one or both of the optional post extensions from the bracket.

- 5) Attach the other pieces of the bracket to the mounting plate. See Figure 10.

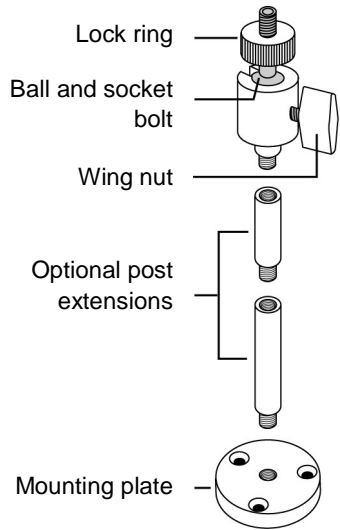


Figure 8. Bracket parts

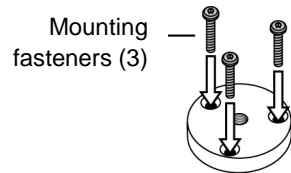


Figure 9. Attaching the mounting plate to the mounting surface

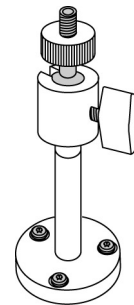
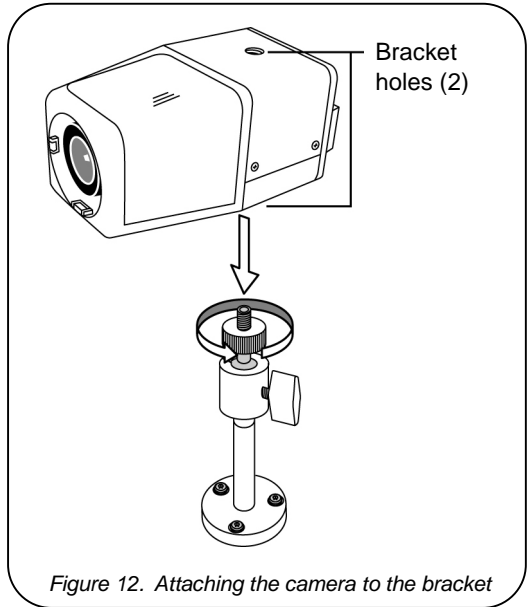
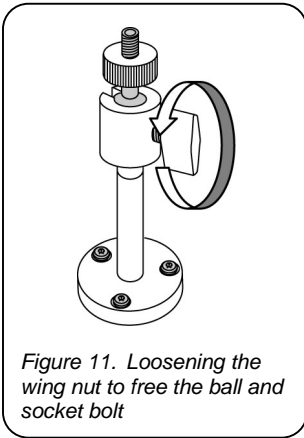


Figure 10. Mounted bracket

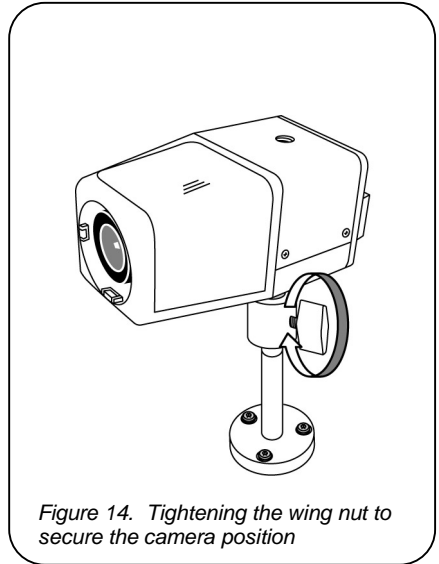
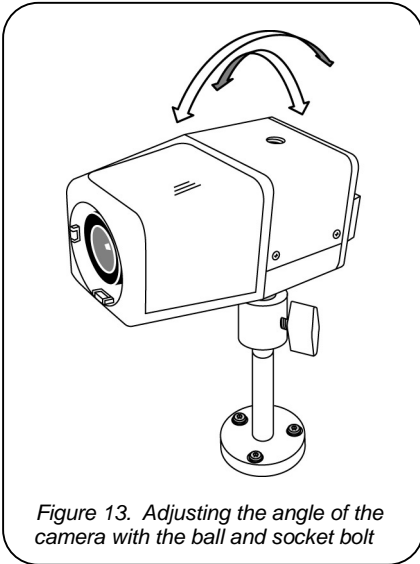
4.2 ATTACHING THE CAMERA TO THE BRACKET

- 1) Turn the wing nut (Figure 8) on the bracket counterclockwise to free the ball and socket bolt (Figure 8). See Figure 11.
- 2) Screw the ball and socket bolt into the bracket hole in the top or bottom of the camera. See Figure 12.
- 3) Tighten the lock ring (Figure 8) to secure the camera to the ball and socket bolt. See Figure 12.



4.3 ADJUSTING THE CAMERA ANGLE

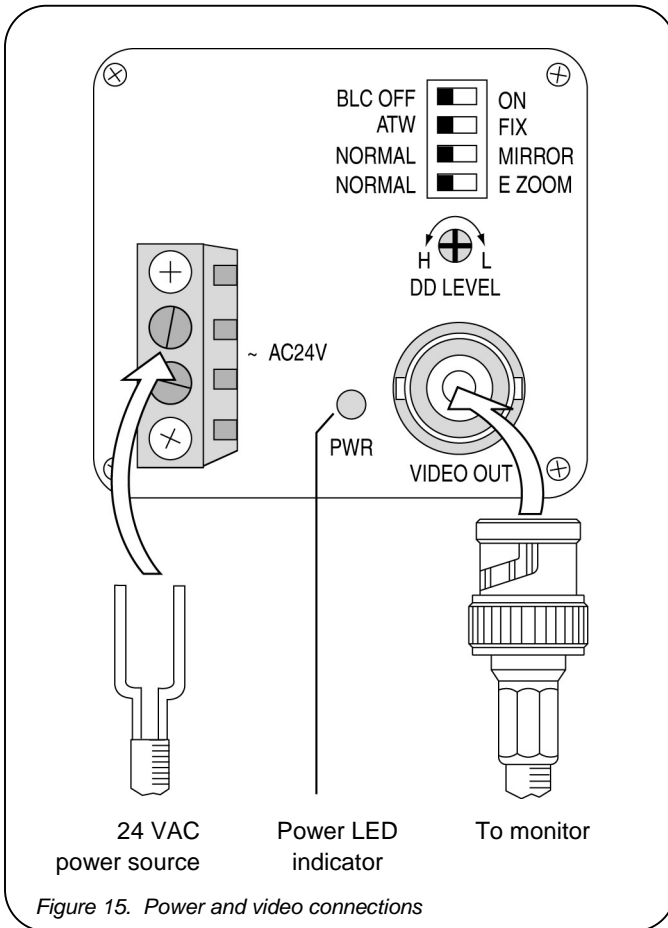
- 1) If necessary, turn the wing nut (Figure 8) on the bracket counterclockwise to free the ball and socket bolt (Figure 8). See Figure 11.
- 2) Swivel the camera on the ball and socket bolt to adjust the camera angle. See Figure 13.
- 3) Turn the wing nut clockwise to tighten it and secure the camera position. See Figure 14.



5 MAKING CABLE CONNECTIONS

Note: This camera is 24 VAC only.

See Figure 15 and perform the following.



- 1) Attach the provided BNC connectors to the ends of the video cable.
- 2) Connect the video cable to the monitor's video in BNC connector.
- 3) Connect the other end of the video cable to the camera's **VIDEO OUT** connector.

- 4) Loosen the ~**AC24V** terminal connectors on the terminal block and connect the power cable to them.
- 5) Tighten the terminal connector screws until snug, ensuring that the power leads are secure.
- 6) Connect the other end of the power cable to the power supply unit and tighten the connector screws until snug.
- 7) Supply power to the camera.

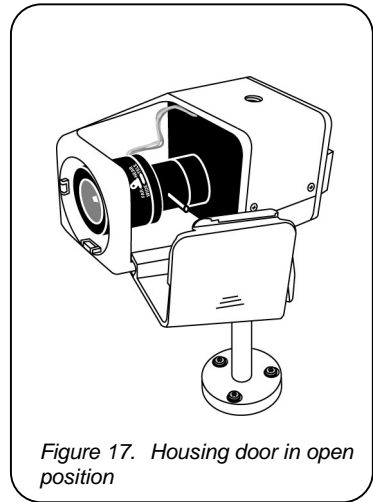
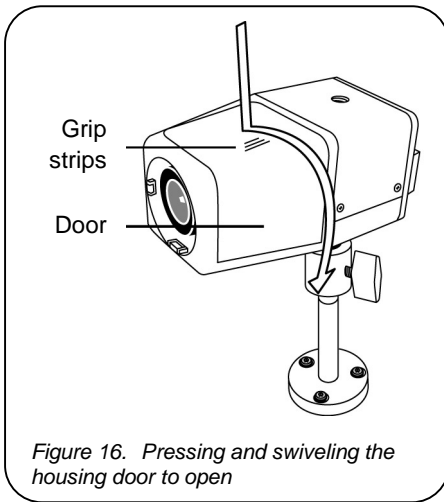
Note: When you supply power to the camera the **PWR** LED illuminates. If the **PWR** LED does not illuminate, check the terminal block connections and power source.

6 MAKING CAMERA ADJUSTMENTS

To open the housing see section 6.1. To adjust the camera focus see section 6.2. To make direct drive auto iris level adjustments see section 6.3.

6.1 OPENING THE HOUSING

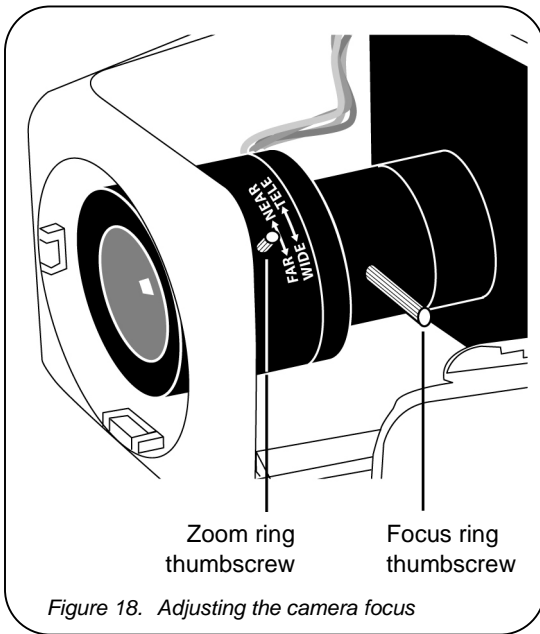
See Figure 16 and Figure 17 and perform the following.



- 1) Hold the camera with your fingers on the bottom of the camera and your thumb on the grip strips on top of the door.
- 2) Press down on the door with your thumb to unlock it from the housing.
- 3) Swivel the door on its hinge away from the camera.

6.2 ADJUSTING THE CAMERA ZOOM AND FOCUS

See Figure 18 and perform the following.



- 1) Loosen the zoom ring thumbscrew.
- 2) Turn the zoom ring to set the desired zoom.
- 3) Tighten the zoom ring thumbscrew.
- 4) Loosen the focus ring thumbscrew.
- 5) Turn the focus ring to set the desired focus.
- 6) Tighten the focus ring thumbscrew.

6.3 ADJUSTING THE DIRECT DRIVE LEVEL

It might be necessary to adjust the direct drive level to achieve a good picture in all lighting conditions. Use an insulated adjustment tool to rotate the direct drive auto iris level adjuster (Figure 2) on the back panel of the camera to the setting appropriate for your lighting conditions.

